

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## TILLERING DYNAMIC OF PAIAGUAS PALISADEGRASS AFTER INTERCROPPING WITH SORGHUM IN DIFFERENT FORAGE SYSTEMS

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The better understanding of the grazing management resulting in increase of productivity and better utilization of the forage produced. Thus, evaluate the tillering dynamic of Paiaguas palisadegrass after sorghum intercropping for pasture recovery in different forage systems with crop-livestock integration. The experiment was conducted in the Goiano Federal Institute, Rio Verde campus. The experimental design was a randomized complete block design with four replications. The treatments were composed forage systems: Paiaguas palisadegrass in monoculture, sorghum intercropped with Paiaguas palisadegrass in the row, sorghum intercropped with Paiaguas palisadegrass in the interrow, and sorghum intercropped with oversown Paiaguas palisadegrass. The evaluations were carried out in the four climatic seasons of the year, in the same plots, during the period of one year, in plot was 1042 m<sup>2</sup> and was divided into 20 paddocks. The animals used were of the Nelore breed and included 32 females, with a mean age of 12 months. The grazing method was the continuous stocking, with a variable stocking rate. For evaluations of the population dynamics of the tillers, two PVC rings (20 cm in diameter). The first tiller marking was performed after grazing, with a color and called zero generation (G0). In the following month, the existing tillers in the rings from G0 were counted (only the live ones), and the new ones marked with a different color. These tillers were then named as 1st generation (G1). Among the variables of tillering dynamics, the tiller appearance rates (TAR), tiller survival rate (TSuR), tiller mortality rate (TMoR), and tiller population density (TPR) were not influenced ( $p > 0.05$ ) by the different forage systems. For the seasons, a significant effect ( $p < 0.05$ ) was observed for all variables. The TPR presented the highest values in summer and fall. The TSuR was higher in the spring and summer. The TMoR, followed by fall. The TPR was higher in the fall and summer. These variables are directly correlated with light intensity, rainfall, temperature, and nutrients, especially nitrogen. The results showed that the intercropping do not affect the tillering parameters of Paiaguas palisadegrass.

**Keywords:** tillers, survival rate, density

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